REMARKS/ARGUMENTS

Applicant confirms the election of species 1 (original claims 1-8). The claims currently presented are readable on the elected species.

Reconsideration of the rejection under 35 U.S.C. §112 is requested. The term "high molecular weight" is in common use in the field of papermaking belt manufacture, and appears in the claims of numerous patents, for example, 6,319,365, 6,325,897, 6,331,231, 6,440,274 , 6,699,368, 6,736,939, 6,780,287, 6,858,291 and 6,929,718, copies of which are attached.

Reconsideration of the rejections under 35 USC sections 102 and 103 is also requested.

Claim 1 has been amended to incorporate limitations from dependent claims 2 and 5. Claim 2 has been cancelled in its entirety, and the limitations imported from claim 5 into claim 1 have been taken out of claim 5, and also from claim 7. Claims 2, 4, 6 and 8-12 have been cancelled.

The principal difference between the invention and the prior art as represented by Gstrein is that Gstrein's exposed fibers overlie the polymer fiber structure 12 and the compressible polymer layer 14 formed therefrom; they are not embedded in an elastic section. In Gstrein, the exposed fibers at the wet paper web side are in a "thin, fibrous or felt-like surface layer(flocking) 15" (col. 3, lines 61-64) that is described as arranged "***on***" the polymer fiber structure 12. (col. 3, line 63. As described elsewhere in Gstrein's specification, a thermo-mechanical treatment of the structure 12 "***superposes*** the fibrous primary texture of flock 15 with a

coarser but also feltlike random and pressure resistant secondary texture." (col. 4, lines 14-16).

There is no suggestion in Gstrein that the fibers of the surface layer 15 are in part protruding and in part embedded. In the applicant's invention, on the other hand, the belt has fibers parts of which are embedded in an elastic section on the wet paper web side, and parts of which protrude. This feature is now set forth in claim 1 by the language "said belt having fibers, parts of which are embedded in said high molecular weight elastic section, and parts of which protrude from said web-contacting surface."

In the rejection of claim 2, Hagfors was relied upon primarily for a disclosure of fibers having an average protruding length of from 1 to 30 microns, a range which overlaps the Applicant's claimed range of between 0.01 and 3 mm (10 to 3000 microns) for the average length of the protruding parts of the fibers.

The Hagfors invention is a transfer belt in which a fiber batt is impregnated with a polymer matrix, and the surface of the polymer matrix is ground to expose some of the fibers. Some of Hagfors' fibers are hydrophilic; others are hydrophobic. When exposed at the surface, the hydrophilic fibers attract water, while the hydrophobic fibers repel water. The combined action of the hydrophilic and hydrophobic areas cause the water film to break into drops, allowing the wet paper web to detach easily from the transfer belt.

Hagfors explains that the roughness of the surface of his belt is a function of both the fineness of the fibers and the roughness of the abrasives used to grind the surface of the belt. (Hagfors, column 1, line 64 - column 2, line 2) As explained in Hagfors at column 2, line 33, the "batt fibres

extend[ing] ***to*** the surface of the polymer layer," and (at column 2, lines 47-49) ". . . the polymer layer is ground to a suitable roughness, whereby fibres are exposed ***on*** the surface of the transfer belt." At column 4, lines 23-26, Hagfors explains that the surface of the polymer matrix is "ground so that the batt fibres ***reach*** the surface of the transfer belt." In short, Hagfors describes a belt in which the embedded fibers are exposed at the surface of the polymer layer; not one in which they extend past the surface. The fineness of embedded fibers, can affect the surface roughness of an elastic layer even when they do not protrude. Therefore, it cannot be concluded from the fact that Hagfors mentions that roughness is controlled in part" by the degree of fineness of the fibre" (col. 2, lines 1-2), that the fibers protrude.

The range of 1 to 30 microns in Hagfors' description (at column 4, line 27) refers not to the lengths of protruding fibers, but rather to the average surface roughness Ra of the transfer belt, the surface roughness resulting from two separate factors: the roughness of the abrasive used in the grinding operation, and the degree of fineness of the fibers. Hagfors provides no information concerning the extent to which his fibers protrude, and in fact, although Hagfors' FIG. 1 seems to depict some protrusion of fibers at the surface, Hagfors' description is devoid of any suggestion that the fibers should protrude, much less that they should protrude in such a way that the average length of their protruding parts falls in the range of 0.01 to 3 mm.

All of the grounds of rejection depend on Gstrein, Hagfors, or a combination of the two. Gstrein essentially discloses protruding fibers that are in a superposed surface layer, and not embedded in an elastic layer; Hagfors discloses

exposed fibers that operate without protrusion. Neither suggests a wet paper web transfer belt having fibers, parts of which are embedded in an elastic section, and parts of which protrude from a web-contacting surface, wherein the average length of the protruding parts of the fibers is between 0.01 and 3 mm. Accordingly, claim 1, as here amended defines subject matter that is neither anticipated, nor shown to have been obvious, by the art relied upon in the Office action.

Favorable reconsideration and allowance of claim 1, and its dependent claims 3, 5 and 7 are respectfully requested.

Respectfully submitted,
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Enclosures
copies of patents
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